REMARKS

This paper is submitted in response to the Office action mailed on April 13, 2009. This paper amends the specification and claims 14-17. Accordingly, after entry of this Amendment and Response, claims 14-17 will be pending.

I. Claim Rejections Under 35 U.S.C. § 112

The Office action rejects claim 14 under 35 U.S.C. § 112, second paragraph, as indefinite for failing to particularly point out and distinctly claim the subject matter which the Applicant regards as the invention. Specifically, the Office action asserts that the terms "the interface" and "the virtual machine interface" lack proper antecedent basis. This response amends claim 14 and the Applicant respectfully submits that claim 14 is definite.

II. Claim Rejections Under 35 U.S.C. § 101

The Office action rejects claims 14-17 under 35 U.S.C. § 101 as directed to non-statutory subject matter. Specifically, the Office action interprets the term "tangible computer-readable medium" to include carrier waves. This response amends claims 14-17 and the specification to clarify that the claimed "computer-readable storage medium" does not include carrier waves. Thus, the Applicant respectfully submits that claims 14-17 are directed to statutory subject matter.

III. Claim Rejections Under 35 U.S.C. § 103

The Office action rejects claims 14-17 under 35 U.S.C. § 103(a) as unpatentable over Folliot, "A Dynamically Configurable, Multi-Language Execution Platform" pages 175-181 ("Folliot") in view of Marchesseault (U.S. Patent No. 6,343,308) ("Marchesseault"). The Applicant respectfully traverses the rejections.

To reach a proper determination under 35 U.S.C. § 103, the examiner must step backward in time and into the shoes worn by the hypothetical "person of ordinary skill in the art" when the invention was unknown and just before it was made. In view of all factual information, the examiner must then make a determination whether the claimed invention "as a whole" would have been obvious at that time to that person. Knowledge of applicant's disclosure must be put aside in reaching this determination, yet kept in mind in order to determine the "differences," conduct the search and evaluate the "subject matter as a whole" of the invention. See *MPEP 2142*.

Among other limitations, amended claim 14 recites "a bi-directional virtual machine interface...for communication between a first support library...and the single virtual machine implementation..., the bi-directional virtual machine interface supports communication between a second support library..., capable of replacing the first support library, and the

virtual machine implementation without modification of the bi-directional virtual machine interface or the virtual machine implementation." Claims 15-17 recite similar limitations. The Applicant respectfully asserts that Folliot and Marchesseault do not teach or suggest the above limitations, alone or in combination.

The Office action cites to Folliot as disclosing the virtual machine interface supporting communication between a second support library, capable of replacing the first support library, and the virtual machine implementation without modification of the virtual machine interface or the virtual machine implementation. *See Folliot; unload and load the VMlets, section 1, page 176 – section 2.* However, it is respectfully submitted that Folliot does not disclose the recited limitations of claim 14.

The VMlets of Folliot each provide support for a specific bytecode language to the VVM (virtual virtual machine). *See Folliot; VMlets, section 2.1, page 178.* When an application composed of a specific bytecode language is run, the VMlet for that specific bytecode language is loaded and utilized to translate the specific bytecode into VVM instructions. *See Folliot; VMlets, section 2.2, page 179.*

Folliot, however, does not teach or suggest a virtual machine interface that supports communication between one of the VMlets, capable of replacing another VMlet, and the VVM without modification of the virtual machine interface or the VVM. Rather, Folliot discloses a separate VMlet for each kind of specific bytecode. Folliot loads and unloads VMlets depending on the kind of specific bytecode that needs to be translated for the VVM. Loading and unloading of VMlets is not replacing as each VMlet performs a different function, i.e. translating the specific bytecode language associated with that VMlet into VVM instructions. Thus, the VMlets are not capable of replacing other VMlets. Hence, Folliot does not teach or disclose "a bi-directional virtual machine interface…for communication between a first support library…and the single virtual machine implementation…, the bi-directional virtual machine interface supports communication between a second support library…, capable of replacing the first support library, and the virtual machine implementation without modification of the bi-directional virtual machine interface or the virtual machine implementation."

Marchesseault does not cure the defects of Folliot. Marchesseault merely discloses using a class interface to enable loading of an application that calls classes that are not supported by the version of the virtual machine running the application. The class interface in Marchesseault does not allow the virtual machine to utilize the unsupported classes. Rather, the class interface just allows the application to load, instead of crashing, despite calls to unsupported classes. Because the application is able to load, the application will execute as long as the unsupported classes are not utilized during execution. If the application utilizes the unsupported classes during execution, the application still crashes.

With respect to the claimed inventions, because the bi-directional virtual machine interface defines the virtual machine implementation-dependent operations performed by the virtual machine, the bi-directional virtual machine interface enables the second support library to replace the first support library without modification of the virtual machine implementation or the bi-directional virtual machine interface. The combination of Folliet and Marchesseault does not provide such functionality. In short, the combination of Folliet and Marchesseault fails to teach or suggest a bi-directional virtual machine interface for communication between a first support library and the single virtual machine implementation, the bi-directional virtual machine interface supports communication between a second support library, capable of replacing the first support library, and the virtual machine implementation without modification of the bi-directional virtual machine interface or the virtual machine implementation.

Thus, for at least these reasons, the Applicant respectfully submits that claims 14-17 are patentable over the combination of Folliet and Marchesseault.

IV. Conclusion

The Assignee thanks the Examiner for his thorough review of the application. The Assignee respectfully submits the present application, as amended, is in condition for allowance and respectfully requests the issuance of a Notice of Allowability as soon as practicable.

The Assignee believes no fees or petitions are due with this filing. However, should any such fees or petitions be required, please consider this a request therefor and authorization to charge Deposit Account No. 04-1415 as necessary.

If the Examiner should require any additional information or amendment, please contact the undersigned attorney.

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Respectfully submitted,

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